

PACKET PROCESSOR WITH REAL-TIME EDIT PROGRAM CONSTRUCTION ENGINE

ABSTRACT

A switch includes one or more programmable packet switching
5 controllers. The programmable packet switching controller has a
real-time edit program construction engine. The edit program
construction engine receives packet data, e.g., the header data,
and disposition decisions generated by, for example, an
application engine. The edit program construction engine uses
10 the packet data and the disposition decisions to construct edit
programs in real-time. The edit programs include a number of
instructions for performing operations, such as COPY, DELETE,
RECORD, PLAYBACK, INSERT and OVERWRITE, and are stored in an
instruction RAM associated with an edit engine. The edit engine
15 executes the instructions to modify inbound packets in order to
transmit them as outbound packets.